

1. Identify ways that corporations are a sustainability problem, referencing at least four examples from films you watched this semester. (363 Words)

Many corporations operate using unsustainable practices that lead to the sustainability problems we face today. Corporations take the stance that their sole purpose is to make money for their shareholders. This stance leads them to the position that they should partake in whatever process maximizes the money they make regardless of the environmental, social or economic impact of these practices. Because a corporation is legally considered a person, as described in "The Corporation" the individuals responsible for enabling these practices have little to know individual accountability. Even if the person in charge is aware of the consequences of their actions they know that ultimately they are personally shielded by the umbrella of the corporation they work for. While this is true in some cases, not all corporate executives are deliberately creating sustainability problems. Some are genuinely unaware of the problems they are creating. While this is basically defense by ignorance it is what happens in some cases. Also from the film, "The Corporation" there is a story about a man named Ray Anderson, chief executive officer of the largest commercial carpet producing company in the United States. His company was responsible for enormous amounts of pollution as well as other unsustainable practices. According to his testimony he was unaware of the impact his company's practices on the environment. When he was made aware of the problems he was creating and contributing to he began to change things within the company to help correct these practices. He set his goal for them to become a completely sustainable company. This was not completely possible but, he managed to enact many changes that helped to dramatically reduce the negative impact his company was having on the environment. Another example of an industry creating a sustainability problem is from the film "The End of the Line." In this film a fishing industry in North America is cited for causing the near extinction of the North American Cod. They continued to fish the species until it was nearly completely eliminated. This shows how greed and competition in an industry can lead to ecological destruction even when that business is completely reliant on that ecological system to sustain itself.

2. Describe how science can be a sustainability problem; referencing at least four examples from films you watched this semester. (352 Words)

The constant strive and desire to make life simpler and to improve technology has led to the unsustainable practice in many scientific fields. From university laboratories to corporate research facilities there are countless examples of the negative impacts of their practices on the surrounding environment. In recent years scientists and engineers have developed new drilling technology called hydraulic fracturing (hydro-fracking) that uses horizontal drilling to harvest, previously economically infeasible, natural gas deposits in deep shale formations. In doing so these processes require the pumping of chemicals into these wells. The chemicals used are newly developed and mostly unregulated due to the fact that little research has been done to explore the impact of them on the ecology of the areas they are used on and the people who

inhabit the nearby cities and towns. This was highlighted in Professor Yuri's Presentation on the scarcity of fresh water and the effect that hydraulic fracturing has on fresh water sources. While this new science and technology will allow us to harvest new sources of energy and rely less on foreign countries for energy it is having a devastating ecological effect. Another source of waste and the cause of a sustainability problem is the waste from laboratories. As discussed in class labs use disposable pipets and centrifuge tubes. These products are typically thrown out and are seldom recycled because of the chemical residues they contain. Not only does this create excess waste and a demand for more plastic products derived from petroleum but, in addition it means these chemicals are released in landfills. This can have a negative effect on the surrounding environment. The science used in developing newer batteries for electric cars have also led to some sustainability issues. The batteries require rare earth metals, which are energy intensive to mine and when not recycled or disposed of properly can be damaging. As new technology develops, the demand for resources increases and the resources we have are limited and will only sustain so much. This means that as long as science develops new practices and principles the demand for resources will continue to increase.

3. Describe ways that mainstream media is a sustainability problem, referencing at least four examples from films you watched this semester. (322 Words)

Today's media is beholden to corporations, profits, and the political interests that they hold. News organizations are not unlike most other corporations in that they are trying to make money. This means that they do not always focus on the most important and pressing issues as they may claim but, rather they just spit out what people are interested in and want to hear. This is done so that they can improve their ratings and sell more advertising at higher prices. This poses a sustainability problem because some issues, that attention should be brought to, to be swept under the rug because of fear of hurting a certain company's image or a politician's reputation. The reason for not wanting to hurt certain company's image is because that company may spend money in advertising with that news organization. In the case of the politician the news organization may have some interest in maintaining that politician's status for their own benefit. The new industry as whole has a sustainability issue when it comes to their credibility. While people may be watching their broadcasts a study shows that from 1998 to 2010 some of the largest news organizations' in the United States, credibility dropped by 6.8% on average. This shows that people are slowly beginning to catch on to the practices that happen behind the scenes at some new networks. This is likely due to the ease of access of information on the internet. It shows that while their rating may still be maintaining constant levels their credibility is declining. It can be inferred that news is now becoming more of a source of entertainment than factual objective news. As long as new networks remain beholden to money, corporations and politician or political parties it will be difficult to find mainstream objective and factual news. People will have to rely on news transmitted on the internet which has its own set of benefits and drawbacks.

4. Describe how the advertising industry a sustainability problem. Discuss the environmental implications of "communication for commerce," the effort to create emotional connections between consumers, commodities and companies, and the cultivation of "loyalty beyond reason" (The Persuaders). Also discuss whether sustainability advocates should borrow techniques from the advertising industry to advance their message. (327 Words)

Billions of dollars are spent each year on advertising, which includes research into the psychology of consumers, and what makes them buy more. Companies would not invest such large sums of money into something without knowing its effectiveness and that it is well worth the cost. The techniques used in modern advertising are so deep and secretive that some are not even know. In the film "The Persuaders" advertising guru and marketing specialism Clotaire Rapaille talks about his research into the "reptilian" brain. He is referring to a subconscious part of the brain that he believes is strongly influential in terms of what people decide to buy. As stated he believes this part of the brain is only accessible through the subconscious, which make it difficult to target. He has done many studies attempting to isolate certain things that influence the reptilian brain effectively. The advertising of companies goes beyond this subconscious targeting as well. Many companies have successfully built emotional loyalty between the consumer and their products. Emotional loyalty is what essentially guarantees a company's ongoing success in a global market. If an emotional connection is built between a product and a base of consumers it is difficult to break, and consumers will justify purchasing that product over other regardless of price and quality differentials. Companies also create needs in consumers' minds through advertising that they would not necessarily normally feel. In doing this they create more of a demand for products, which also increases demand on the resources and energy used in the production of those goods. As companies continue to push their products and drive society further into a heavy consumerist mindset they are creating a sustainability problem for themselves and the resources available. As all resources are limited they will eventually deplete the resources they need to produce the goods they sell. They also put a huge demand on the energy industry, which primarily utilizes fossil fuels in the production of electricity.

5. Discuss how Internet communication and other forms of new media are sustainability problems, as well as a means to sustainability solutions. (301 Words)

Internet plays to both sides of sustainability problems, in some cases it acts to add to and worsen the problems while in other it contributes to the solutions to the problems. The Internet has led to the creation of a completely new market, the volume of sales of which has never been achieved. The Internet allows consumer to shop at leisure from home. Consumer will shop and purchase things they wouldn't otherwise go out to purchase. With this increase in the volume of sales also comes the increase in transportation needed for these goods. This increases the demand and consumption of fuel for trains, planes, cars, vans, and trucks, which leads to significant output of greenhouse gasses. The Internet has also led to a new type of advertising that was not possible before. Information of what people search from particular IP addresses are recorded and used to create advertisements that are so specific to the target they are being aimed at. This, as discussed in the previous response, leads to more consumerism. On the other side of the issue the Internet can and is utilized to identify and solve sustainability problems. It brings forth a new form of global, free, and fast communication that has never been. People who notice problems or people who have ideas for solutions are able to connect and share them more easily. This allows people to organize and take action more efficiently and effectively. On a somewhat smaller scale it allows for the reduction in postal mail by replacing mail with email. This reduces the need for fuel for delivery of that mail. It also allows much

quicker communication so that issue that need more immediate attention get that attention faster than before so that the problem can be remedied before it becomes a larger issue.

6. **In a 2010 NY Magazine article, Jon Stewart describes his media team as "Soil enrichers. Maybe we can add a little fertilizer to the soil so that real people can come along and grow things." What does Stewart mean, and how persuaded are you by the metaphor? The NY Magazine article is "[America is a Joke](#)" (339 Words)**

The quote from John Stewart, "But I know the difference between real social change and what we do. You know what we are? Soil enrichers. Maybe we can add a little fertilizer to the soil so that real people can come along and grow things." is a metaphor he uses to describe the role he feels he plays in the media. He is refereeing to his viewers as soil, the information he provides to be fertilizer to that soil and the information from "real" news sources to be the seeds to actually start growing. He is saying that through his comedy he is exposing people to things and while he may not be causing them to take any action he is opening they're eyes slightly and that as they continue to hear more about it on the news they will be more prone to some type of action. I tend to subscribe to the same thought process he describes. I think people who typically wouldn't watch news daily may watch the Daily Show for a laugh and hear information they wouldn't otherwise be exposed to. This may lead them, the real people, to do some further investigation of their own into the matter and in case where action can be taken it could motivate them to that point. As with most news networks the Daily Show exhibits some bias. The difference between the Daily Show and the "real" news networks is that John Stewart does not claim to be unbiased and objective where as other new outlets try to hide their bias so that a larger audience will listen and potentially believe what they are saying. This misleads some people into believing things that may not be entirely true or may be taken out of contexts. John Stewart also acts as a check to other news shows, politicians or anyone else in the public eye. By poking fun at these things he brings attention to the absurdity of some of them, which helps people to make more informed decisions.

7. **Many Americans are skeptical about climate change, and climate science. What do you think explains the skepticism? What do you think scientists should do to further enroll the public in concern about climate change? The articles listed below will provide material for your argument. Reference both articles in your answer. (325 Words)**

The skepticism with regard to global climate change is a result of many different factors. One explanation is denial. People would like to deny the possibility of climate change because it allows them to continue the behavior they are used to and not feel guilty or the need to change. If people accepted global warming it would mean stepping outside of their comfort zones in order to help solve the problem. A reason for corporations to invest money in research to discredit climate scientists is so they can continue their practices without costly modifications to their production to reduce greenhouse gas emissions. There are other more empirical reason for skepticism as well. Some argue that the temperature samplings that are used to describe global warming are not large enough samples. For instance the fact that in the last 50 years we have experiences some warming does not necessarily indicate an overall warming trend. Temperature can fluctuate greatly over decades. Another point is that the temperature data from evidence other than a direct temperature reading may not be accurate. Some temperature

data is recorded by observing the rings in trees. This may not be an accurate method because some tree data shows cooling over the last 50 years while the actual thermometer and satellite data shows otherwise. The final reason is that there is no direct evidence linking that humans cause the observed warming. There is evidence of an increase in CO₂ concentrations over the same time as the warming but some dispute that this actually caused the warming because they claim that the atmospheric absorption bands are already saturated meaning any additional increase in CO₂ concentrations would not cause warming. Based on the USA Today article it would seem that incorporating some story line would positively affect the public perception of global climate change. In particular a story containing some likeable hero would best convince people of the reality of global climate change.

- 8. Explain, from your point of view, what the US government should do to advance environmental sustainability. What should the US government not do? Together, your lists should include at least six items. Include concrete examples to illustrate your points. (335 Words)**

The United state government has immense power and could work to help solve many of the sustainability issue faced today. The EPA has already begun to work on the solutions to these problems. They have made regulations that limit the emissions from industries. These regulations while helpful should be imposed with caution. Some of the economic effects of these regulations may be detrimental to the United States and its people. As regulation are imposed within the United States the cost of production in the United States increases which makes production in other countries more economically feasible. If these countries, where production is shifted to, do not regulate emissions then they will be pollution more. This in essence cost the United States consumers more money, loses American jobs, causes the exploitation of laborers in other countries, and may even cause an increase in greenhouse gas and other pollutant emissions. Since production is being shifted to countries with fewer regulations not only are there more pollutants in the production but the goods must also be shipped back to the United States for sale. This is why imposing these regulations can result in a net negative effect. Another downside to the imposition of regulation through the EPA is that it is an appointed bureau and not elected. While the appointments to members of the agency are done by elected officials it still somewhat sidesteps the elective process and leaves more room for corruption and lobbying. One way in which the government can act to positively affect a sustainability problem is to provide tax incentives for companies that reduce the amount of greenhouse gas they emit. By doing this companies are driven to reduce emissions on their own and are provided with incentives that can offset the cost of the technology implemented to reduce emissions. The drawback to this is that the financial burden on other taxpayers will increase in order to subsidize these incentives. Additionally lawmakers could make certain practices illegal and hold companies accountable for their actions.

- 9. Identify ten developments (in education, law, media, etc) that you think would help mobilize greater public awareness of and commitment to environmental sustainability. (373 Words)**

- i. Classes in sustainability are offered through many public and private universities. This helps not only in awareness but also in the development of solutions by educating people who will hold influential positions in industry.

- ii. In eleventh grade English we were required to make presentation and write a paper on some form of alternative to fossil fuels in energy use. This made everyone identify some new technology and research it more in depth. It exposed us to the idea of alternative energy technologies and may have inspired some to work towards a career in developing new technologies or in making more sustainable purchases in the future.
- iii. Recent laws in Europe have created a greenhouse gas credit in which companies are allotted a certain number of greenhouse gas credits and that is how much they are allowed to release in that year. If they do not use them then they can sell them to companies that exceeded their allotted credits. If they emit more than they have credit for they are responsible for a fine. This is a good system because it causes companies to be responsible for their emissions and doesn't increase the burden on citizens.
- iv. The Internet has allowed for a completely new form of communication that enables individuals who would otherwise have very little influence to voice their ideas and reach people from around the world.
- v. The Internet also acts as somewhat of a check on the mainstream media. While the media can be influenced by politics or money to report and not report certain things the internet allows these issues that otherwise would be swept under the rug to be exposed.
- vi. Social media in particular such as Facebook and Twitter allow for the rapid distribution of information. Posts on these sites can reach more people than television or radio and are more targeted to people who would respond to them rather than just experiencing the proverbial, in one ear and out the other.
- vii. Cell phones and smart phones have enabled people to be connected constantly. Information is accessible at any hour of the day almost anywhere in the country. With the accessibility of this information awareness can be spread much more efficiently and effectively.

10. What attitudes and cultural constructs in the United States will environmental educators need to work against? Reference at least two films. Briefly describe at least one activity for k-12 students that would work against these attitudes and cultural constructs. (522 Words)

There are attitudes and stigmas associated with the culture within the United States, which act as obstacles to the solution of environmental sustainability problems. One such attitude associated with parts of the culture within the United States is the bigger is better mentality. This attitude is more typically exhibited in males. They have the attitude that driving a big and powerful truck is a sign of manliness. This is a difficult thing to overcome because it is part of how some people are raised and it is deeply imbedded in the culture that surrounds them. Another Difficult stigma to overcome is that environmentalists are just a bunch of "tree huggers." Many people feel that environmental activists are over sensitive and fanatical with respect to nature and that this is what drives them to advocate for sustainable practices. People of general population are not aware of, or are ignorant to, the severity of problems that are present and dismiss the calls to action as fanatical desires to preserve nature. Another attitude

that poses an obstacle to sustainability issues is the attitude of selfishness. In the film, "The End of the Line" there is an example of a group of fisherman that fish cod. They fish the cod population there to near extinction before regulators step in. The fishermen are infuriated that the government would step in and attempt to regulate their way of life. Part of the reason they are so angry is because they were not allowed to fish the cod anymore at all. Had steps been taken earlier in attempt to prevent this they may have been more open to changing their fishing practices. Though they still would have likely presented some resistance for the perceived encroachment on their rights. Children are very impressionable and therefore are a good place to begin to increase sustainability awareness. While children who are too young will not likely understand the full severity and scope of some of the problems we can design activities that lead them to start thinking and becoming aware of some sustainability problems. I think grades nine through twelve are a good target group because they have developed some maturity and are beginning to think more independently. Children in middle school are often immature and may not be as attentive to a message. Where high school kids are beginning to think about the problems in the world and how to solve them. As far as changing their attitudes and behaviors I think this must be done at younger ages because once children go onto junior and senior high they have a perception of the way things are, so to speak. So children in elementary school would be likely more responsive to an attitude or cultural adjustment. This is a touchy subject though. It could cause parents to feel as though the school is parenting their children. In many cases cultural elements of peoples lives are very strongly influenced or created by their religious beliefs. If a school were to begin to un-teach teach certain aspects of children's culture this could be regarded as an attempt to undermine a parents religious beliefs.